

Date: Wednesday, 16/04/2008 3:45:30 PM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : 206B AFT X-TUBE
Job Number : 38621	
Estimate Number : 13221	
P.O. Number :	Part Number : D206667201TRN
This Issue : 16/04/2008 S.O. No. :	Drawing Number : D206-667-241 REVB
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : LANDING GEAR	Drawing Revision : B
Previous Run : 37985	Material :
Written By :	Due Date : 10/05/2008 Qty: 1 Um: Each
Checked & Approved By : <u>JLD 08.4.16</u>	
Comment : Est Rev:A 08-03-06 new issue DD verified by:ec Est Rev B 08.04.02 Removed polish EC verified by:DD	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	D6003102	Crosstube, 206
-----	----------	----------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part number	Description	Batch
1	D6003-102	Crosstube	<u>B25663</u>

Check OD = 2.250"; ID = 1.380"

a.m 08.04.23 ①

2.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
-----	------------	----------------------------

**Comment:** MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA084

2-Turn first side as per Folio FA084

3-File down transition lines smooth.

a.m 08.04.24 ①

3.0	QC1	INSPECT ALL DIM TO DIM SHEET
-----	-----	------------------------------

**Comment:** INSPECT ALL DIM TO DIM SHEET

a.m 08.04.24 ①

4.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
-----	------------	----------------------------

**Comment:** MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA084

2-File down transition lines smooth.

3-Remove sand and plugs

a.m 08.04.24 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 16/04/2008 3:45:30 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206B AFT X-TUBE

Job Number: 38621

Part Number: D206667201TRN

Job Number:



Seq. #:

Machine Or Operation:

Description :

4-Scribe part # and batch # using vibrating stylus as per Dwg D206-667-241

Inside of Cuff(Donot engrave on outside of tube)

a-m 08-04-24 @

5.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

a-m 08-04-24 @

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

AWM 8-4-24

08-04-24 @

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

RT 08-04-25

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

DP 8-4-25

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock in kanban rack

Location: *X tube cell semi finish rack*

RT 08-04-25

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/04/28

Job Completion



mf 08-04-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D206-667-241	REV. B SHEET 1 OF 3
DATE 05.02.04		TITLE CROSSTUBE ASS'Y (206B HIGH AFT)	SCALE NTS
A	00.11.17	NEW ISSUE	
B	05.02.04	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	

RELEASED
05-06-16 [Signature]

Qty	Part Number	Description
X	D206-667-241	CROSSTUBE ASSEMBLY (206B HIGH AFT)
1	D6003-102	CROSSTUBE
2	D2856-400-694	ABRASION STRIP
2	D2891-1	SUPPORT
4	MS21920-20	CLAMP

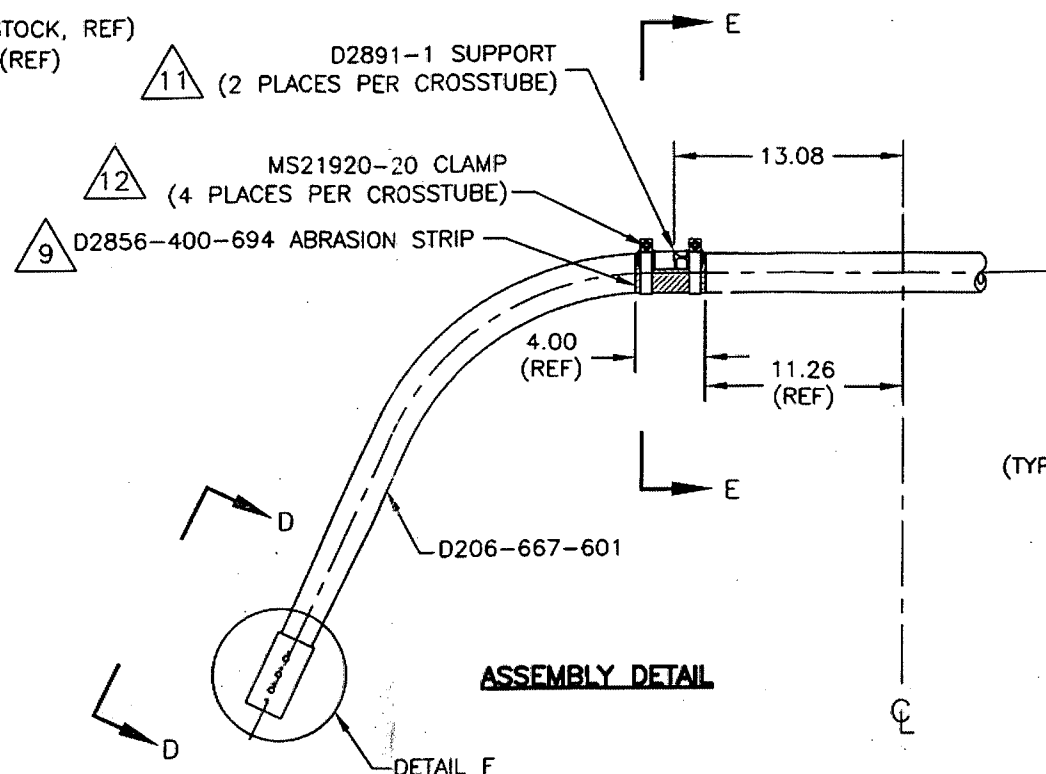
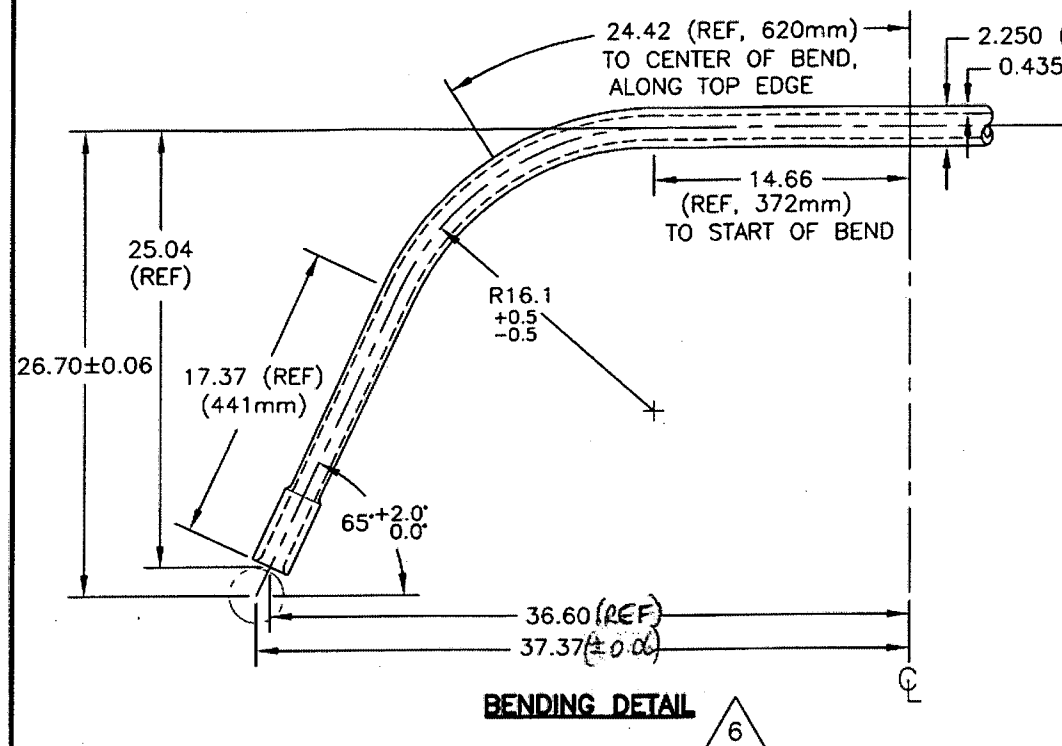
GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) MATERIAL: MANUFACTURED FROM D6003-102
FINISHED LENGTH = 100.60 ± 0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 12 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2856-400-694 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2891-1 SUPPORT, PER QSI 035.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) IT IS OPTIONAL TO SEAL EDGES OF SUPPORTS AND ABRASION STRIP USING SIKAFLEX-241/291 SEALANT.
- 12) TORQUE CLAMPS 80 TO 100 IN-LB.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 38621

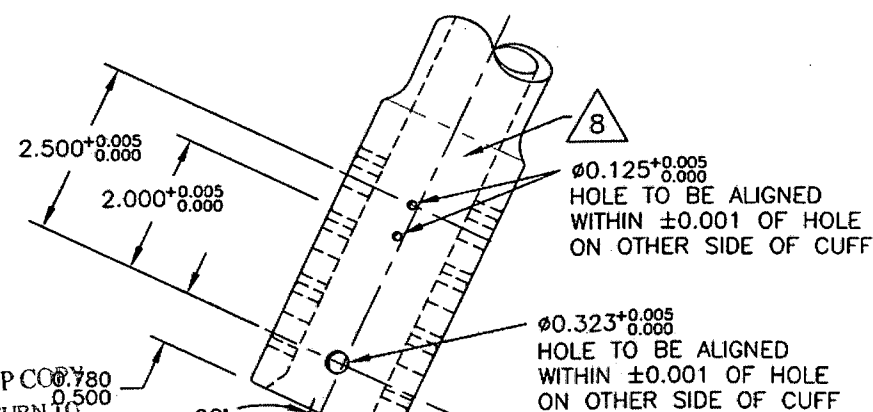
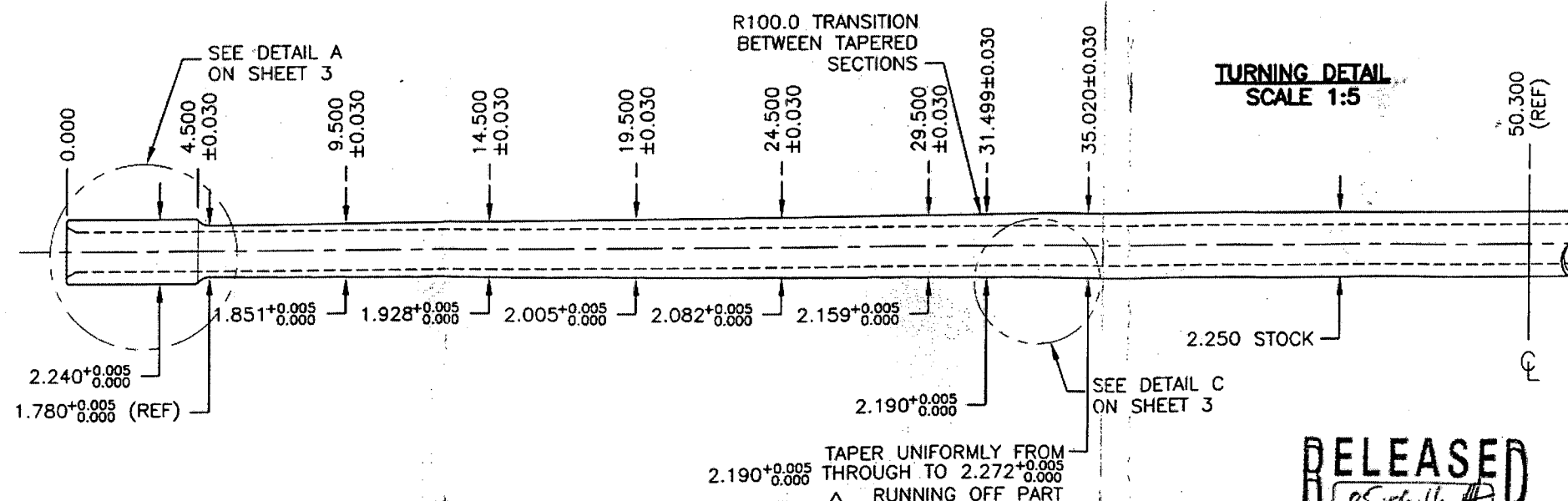
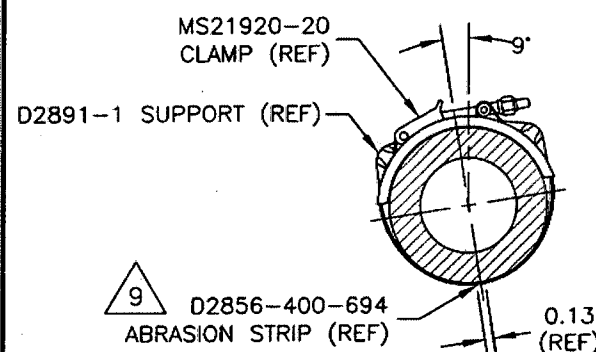
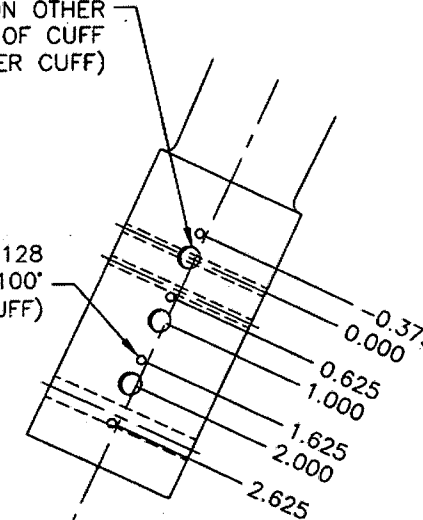
Copyright © 2000 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



(B) $\phi 0.323^{+0.005}_{-0.000}$
HOLE TO BE ALIGNED WITHIN
 ± 0.001 OF HOLE ON OTHER
SIDE OF CUFF
(TYP 6 PLACES PER CUFF)

PILOT $\phi 0.128$
C'SINK $\phi 0.225 \times 100'$
(TYP 8 PLACES PER CUFF)



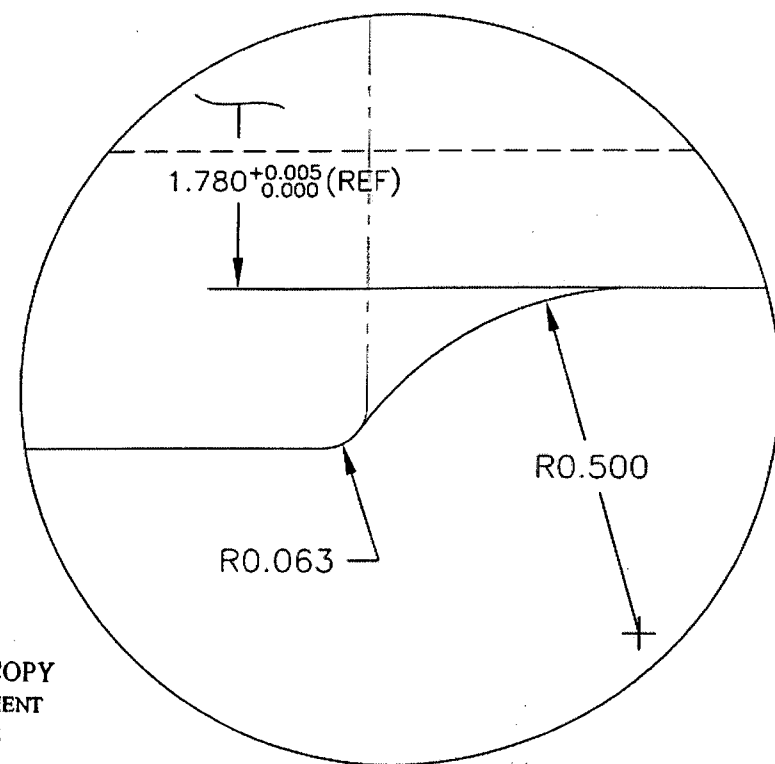
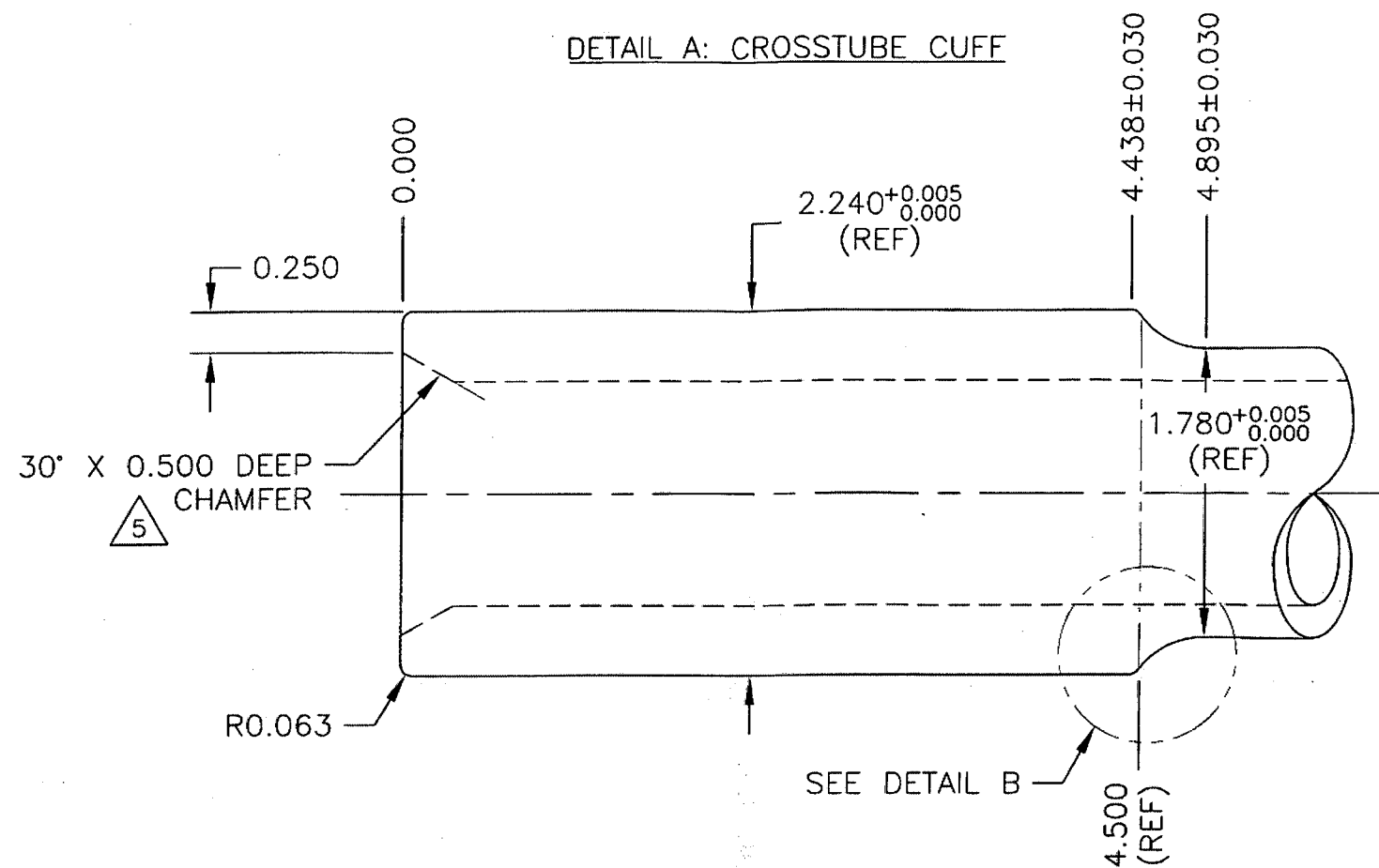
SHOP COPY 780
RETURN TO 0.500
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 386021

RELEASED
05.02.04

COPYRIGHT © 2000 BY DART AEROSPACE LTD.		DESIGN	DRAWN BY	DART	DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED	APPROVED		
DATE		05.02.04		DRAWING NO.	REV. B
				D206-667-241	SHEET 2 OF 3
				TITLE	SCALE
				CROSSTUBE ASS'Y (206B HIGH AFT)	1:10

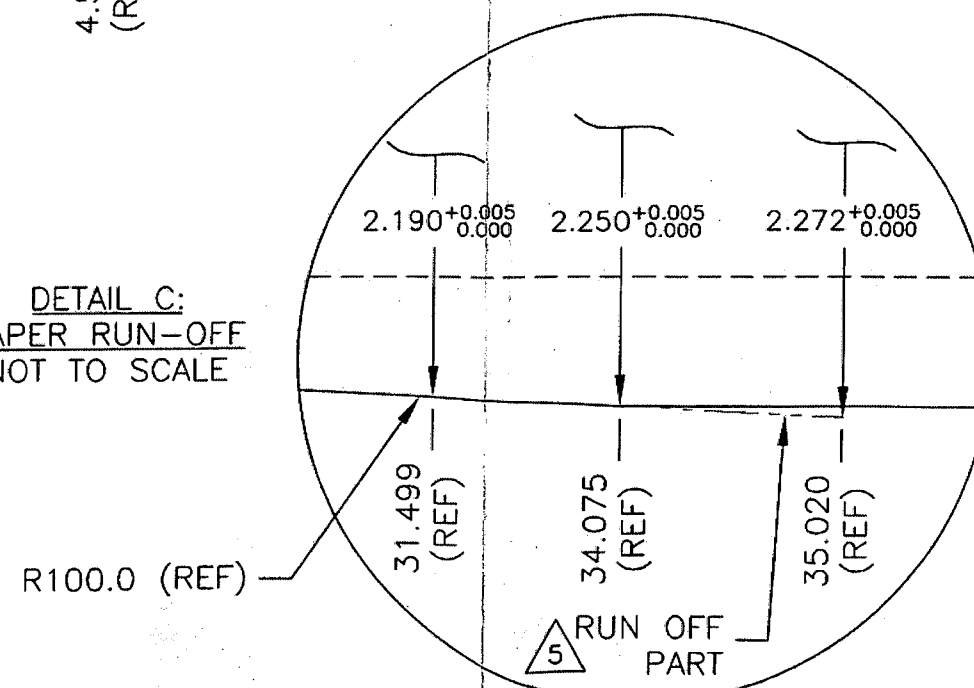
RELEASED
05-06-16

DETAIL A: CROSSTUBE CUFF



DETAIL B: CUFF
TRANSITION
SCALE 4:1

DETAIL C:
TAPER RUN-OFF
NOT TO SCALE



COPYRIGHT © 2000 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL
AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

DESIGN PH	DRAWN BY PH	DART	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
CHECKED PH	APPROVED PH	DRAWING NO. D206-667-241	REV. B SHEET 3 OF 3
DATE 05.02.04		TITLE CROSSTUBE ASS'Y (206B HIGH AFT)	SCALE 1:1

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 3862

DART AEROSPACE LTD	Work Order: 38621
Description: Crosstube Assembly	Part Number: D206-667-241
Inspection Dwg: D206-667-241 Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	30° x 0.500	+/-0.010	30° x 0.500	✓		
	0.250	+/-0.010	0.250	✓		
	2.240	+0.005/-0.000	2.243	✓		
	4.438	+/-0.030	4.450	✓		
	1.780	+0.005/-0.000	1.785			
	R0.063	+/-0.010	R0.063	✓		
	1.851	+0.005/-0.000	1.856	✓		
	1.928	+0.005/-0.000	1.931	✓		
	2.005	+0.005/-0.000	2.007	✓		
	2.082	+0.005/-0.000	2.087	✓		
	2.159	+0.005/-0.000	2.164	✓		
	2.190	+0.005/-0.000	2.194	✓		
SIDE B	30° x 0.500	+/-0.010	30° x 0.500	✓		
	0.250	+/-0.010	0.250	✓		
	2.240	+0.005/-0.000	2.242	✓		
	4.438	+/-0.030	4.438	✓		
	1.780	+0.005/-0.000	1.785	✓		
	R0.063	+/-0.010	R0.063			
	1.851	+0.005/-0.000	1.854	✓		
	1.928	+0.005/-0.000	1.932	✓		
	2.005	+0.005/-0.000	2.007	✓		
	2.082	+0.005/-0.000	2.087	✓		
	2.159	+0.005/-0.000	2.159	✓		
	2.190	+0.005/-0.000	2.195	✓		
	100.60	+/-0.020	100.610	✓		

Measured by: a.m	Audited by: HWM	Prototype Approval:	N/A
Date: 08.04.24	Date: 8-4-24	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.16	New Issue (P/O D206-667-201)	KJ/JLM	B